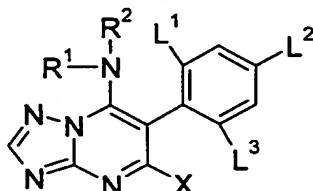


What is claimed is:

1. A 6-(2,4,6-trihalophenyl)triazolopyrimidine of the formula I



5 in which the substituents are as defined below:

10  $R^1$  is  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -haloalkyl,  $C_3$ - $C_8$ -cycloalkyl,  $C_3$ - $C_8$ -halocycloalkyl,  $C_2$ - $C_8$ -alkenyl,  $C_2$ - $C_8$ -haloalkenyl,  $C_3$ - $C_6$ -cycloalkenyl,  $C_3$ - $C_6$ -halocycloalkenyl,  $C_2$ - $C_8$ -alkynyl,  $C_2$ - $C_8$ -haloalkynyl or phenyl, naphthyl, or a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S,

15  $R^2$  is hydrogen or one of the groups mentioned under  $R^1$ ,

20  $R^1$  and  $R^2$  together with the nitrogen atom to which they are attached may also form a five- or six-membered heterocyclyl or heteroaryl which is attached via N and may contain one to three further heteroatoms from the group consisting of O, N and S as ring members and/or may carry one or more substituents from the group consisting of halogen,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -haloalkenyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkoxy,  $C_3$ - $C_6$ -alkenyloxy,  $C_3$ - $C_6$ -haloalkenyloxy, (exo)- $C_1$ - $C_6$ -alkylene and oxy- $C_1$ - $C_3$ -alkylenoxy;

25  $R^1$  and/or  $R^2$  may carry one to four identical or different groups  $R^a$ :

30  $R^a$  is halogen, cyano, nitro, hydroxyl,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -alkylcarbonyl,  $C_3$ - $C_6$ -cycloalkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkoxycarbonyl,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -alkylamino, di- $C_1$ - $C_6$ -alkylamino,  $C_2$ - $C_8$ -alkenyl,  $C_2$ - $C_8$ -haloalkenyl,  $C_2$ - $C_6$ -alkenyloxy,  $C_2$ - $C_8$ -alkynyl,  $C_2$ - $C_8$ -haloalkynyl,  $C_3$ - $C_6$ -alkynyloxy, oxy- $C_1$ - $C_3$ -alkylenoxy,  $C_3$ - $C_6$ -cycloalkenyl, phenyl, naphthyl, a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S, where these aliphatic, alicyclic or aromatic groups for their part may be partially or fully halogenated;

35

$L^1$ ,  $L^2$ ,  $L^3$  independently of one another are chlorine or fluorine, where at least one group is chlorine;

5 X is cyano,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy,  $C_3$ - $C_4$ -alkenyloxy,  $C_1$ - $C_2$ -haloalkoxy or  $C_3$ - $C_4$ -haloalkenyloxy.

2. The compound of the formula I according to claim 1 in which X is cyano,  $C_1$ - $C_4$ -alkoxy,  $C_3$ - $C_4$ -alkenyloxy,  $C_1$ - $C_2$ -haloalkoxy or  $C_3$ - $C_4$ -haloalkenyloxy.

10

3. The compound of the formula I according to claim 1 or 2 in which X is cyano

4. The compound of the formula I according to claim 1 in which X is methyl.

15

5. The compound of the formula I according to claim 1 or 2 in which X is methoxy.

6. The compound of the formula I according to any of claims 1 to 5 in which  $R^1$  and  $R^2$  are as defined below:

20

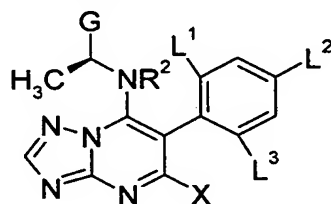
$R^1$  is  $CH(CH_3)-CH_2CH_3$ ,  $CH(CH_3)-CH(CH_3)_2$ ,  $CH(CH_3)-C(CH_3)_3$ ,  $CH(CH_3)-CF_3$ ,  $CH_2C(CH_3)=CH_2$ ,  $CH_2CH=CH_2$ , cyclopentyl or cyclohexyl;

$R^2$  is hydrogen or methyl; or

25

$R^1$  and  $R^2$  together form  $-(CH_2)_2CH(CH_3)(CH_2)_2-$ ,  $-(CH_2)_2CH(CF_3)(CH_2)_2-$  or  $-(CH_2)_2O(CH_2)_2-$ .

7. A compound of the formula I.1:



I.1

30

in which

G is  $C_2$ - $C_6$ -alkyl,  $C_1$ - $C_4$ -alkoxymethyl or  $C_3$ - $C_6$ -cycloalkyl;

$R^2$  is hydrogen or methyl; and

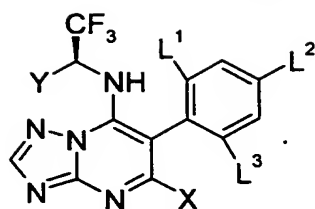
X is cyano, methyl, methoxy or ethoxy and

$L^1$ ,  $L^2$  and  $L^3$  are as defined in claim 1.

35

8. A compound of the formula I.2.

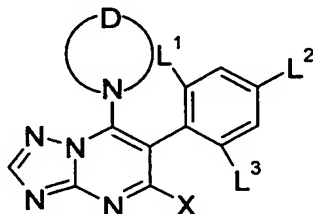
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I.2

in which Y is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and X is cyano, methyl, methoxy or ethoxy and L<sup>1</sup>, L<sup>2</sup> and L<sup>3</sup> are as defined in claim 1.

- 5 9. A compound of the formula I.3



I.3

in which

- 10 D together with the nitrogen atom forms a five- or six-membered heterocyclyl or heteroaryl which is attached via N and may contain a further heteroatom from the group consisting of O, N and S as ring member and/or may carry one or more substituents from the group consisting of halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-haloalkenyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, C<sub>3</sub>-C<sub>6</sub>-haloalkenyloxy, (exo)-C<sub>1</sub>-C<sub>6</sub>-alkylene and oxy-C<sub>1</sub>-C<sub>3</sub>-alkylenoxy; and
- 15

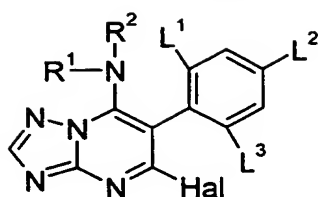
X is cyano, methyl methoxy or ethoxy and

L<sup>1</sup>, L<sup>2</sup> and L<sup>3</sup> are as defined in claim 1.

20

10. The compound of the formula I.3 according to claim 9 in which  
 L<sup>1</sup> is chlorine, L<sup>2</sup> and L<sup>3</sup> are fluorine;  
 L<sup>1</sup> is fluorine, L<sup>2</sup> is chlorine and L<sup>3</sup> is fluorine;  
 L<sup>1</sup> and L<sup>2</sup> are fluorine and L<sup>3</sup> is chlorine; or  
 25 L<sup>1</sup> is chlorine, L<sup>2</sup> is fluorine and L<sup>3</sup> is chlorine.
11. The compound of the formula I, I.1, I.2 or I.3 according to any of claims 1 to 9 in which L<sup>1</sup>, L<sup>2</sup> and L<sup>3</sup> are chlorine.
- 30 12. A process for preparing compounds of the formula I according to claim 2 by reacting 5-halo-6-(2,4,6-trifluorophenyl)triazolopyrimidines of the formula II

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II

in which Hal is a halogen atom with compounds of the formula III

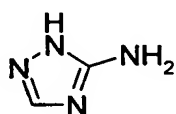
M-X

III

in which M is an ammonium, tetraalkylammonium or alkali metal or alkaline earth metal cation and X is as defined in claim 2.

5

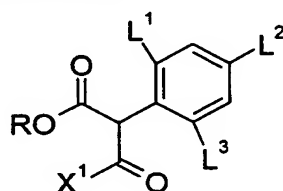
13. A process for preparing compounds of the formula I according to claim 1 in which X is C<sub>1</sub>-C<sub>4</sub>-alkyl, by reacting 2-aminotriazole of the formula IV



IV

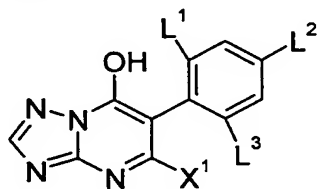
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with keto esters of the formula V



V

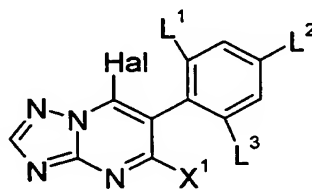
in which R and X<sup>1</sup>, independently of one another, are C<sub>1</sub>-C<sub>4</sub>-alkyl and L<sup>1</sup>, L<sup>2</sup> and L<sup>3</sup> are defined according to claim 1, to give 5-alkyl-7-hydroxy-6-phenyltriazolo-pyrimidines of the formula VI



VI,

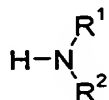
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halogenating VI with halogenating agents to give halopyrimidines of the formula VII



VII

in which Hal is a halogen atom, and reacting VII with amines of the formula VIII



VIII

20

in which R<sup>1</sup> and R<sup>2</sup> are as defined in formula I.

14. A composition, comprising a solid or liquid carrier and a compound of the formula I according to claim 1 or 2.
- 5
15. Seed, comprising a compound of the formula I as claimed in claim 1 or 2 in an amount of from 1 to 1000 g/100 kg.
- 10
16. A method for controlling phytopathogenic harmful fungi, which method comprises treating the fungi or the materials, plants, the soil or seed to be protected against fungal attack with an effective amount of a compound of the formula I according to claim 1 or 2.